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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,499	12/19/2001	Rongjun Zhang	3993968-126973	9359

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EXAMINER

KIM, CHONG HWA

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/026,499

Applicant(s)

ZHANG ET AL.

Examiner

Chong H. Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-35 is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

The Examiner acknowledges the applicant's Amendment filed Dec 22, 2003 in response to the Office action made on Aug 26, 2003.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 10-16, 18-20, and 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Chapman et al., U.S. Patent 6,450,061 B1.

Chapman et al. shows, in Fig. 4, a control pedal assembly comprising, in combination;  
first and second control pedals (AC and CL), each of the first and second control pedals having a first support member, 2, 4, an adjustment member (the screws) and a second support member (the levers connecting the pedals and the screws);

a nut N threadably engaging the screw and adapted to move axially along the screw upon rotation of the screw;

a motor 1 connected to the adjustment member and adapted to move the second support member relative to the first support member;

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a sensor A located on the second control pedal AC, the sensor sensing the movement of the second support member relative to the first support member of the second control pedal;

wherein the sensor is spaced apart from the motor and the sensor is a potentiometer;

a controller member 22 in communication with the sensor to receive signals from the sensor, wherein the controller member is adapted to stop power to the motor when signals from the sensor indicate that the second support member is not moving relative to the first member while power is provided to the motor (as explained from column 3, line 44 to column 4, line 4);

wherein the controller member moves the second support member to a predetermined position when predetermined conditions are met (see column 3, lines 59-67);

wherein the predetermined conditions include a manual switch (18 or 33) or a memory device 26;

wherein the predetermined position is a forward position (inherent since forward position is included in the adjustment process);

wherein the controller member further includes a control device 26 in communication with the controller member and adapted to prevent movement of the second support member relative to the first support member when engaged;

wherein the controller member is adapted to automatically move the second support member in a forward direction relative to the first support member to a predetermined position when predetermined conditions are met;

wherein the controller is adapted to automatically stop the motor when signals from the sensor indicate that the second support is not moving relative to the first support;

wherein one of the first support and the second support carrying a pedal; and

wherein the sensor is a rotational sensor and is located near one of the first support and the second support to sense relative rotational movement therebetween.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman et al.

Chapman et al. shows, as discussed above in the rejection of claim 1, the sensor sensing the relative movement between the first and second support members, but fails to show a second sensor.

It would have been obvious to provide another sensor in the control pedal assembly of Chapman et al., since such addition of a sensor that functions the same way as the first one would have involve a mere provision of extra device. A duplication of parts is generally recognized as being within the level of ordinary skill in the art. *In re Harza*, 124 USPQ 378.

5. Claims 8-9, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman et al.

Chapman et al. shows, in Fig. 4, a control pedal assembly comprising, in combination; first and second control pedals (AC and CL), each control pedal comprising a first support 2 and 4, a screw secured to the first support, a nut N threadably engaging the screw and

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adapted to axially move along the screw upon rotation of the screw, and a second support (levers connecting the pedals and the screws) operatively connected to the nut for fore-aft movement of the second support relative to the first support upon axial movement of the nut along the screw;

a control system including at least one motor 1 operatively connected to the screws to selectively rotate the screws and axially move the nuts along the screws, a sensor A (potentiometer) carried by one of the first and second control pedals, and a controller 22 in communication with the sensor to receive pulses from the control device;

wherein the sensor is located away from the motor and near the screw; and  
wherein the controller is adapted to automatically stop the motor when a lack of the pulses from the sensor indicates that there is no relative movement between the first support and the second support;

but fails to show the pulses indicating the rotation of the screw (Hall effect sensor).

It would have been obvious to replace the potentiometer of Chapman et al. with a Hall effect sensor since the Examiner takes Official Notice of the fact that both sensors measure the relative movement of the adjustable pedal and the selection of any of these known sensors to produce pulses for the controller in Chapman et al. would be within the level of ordinary skill in the art.

As to the matter of another sensor recited in claim 22, it would have been obvious to provide another sensor in the control pedal assembly of Chapman et al., since such addition of a sensor that functions the same way as the first one would have involve a mere provision of extra device. A duplication of parts is generally recognized as being within the level of ordinary skill in the art. *In re Harza*, 124 USPQ 378.

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6. Claims 17 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman et al.

Chapman et al. shows, as discussed above in the rejections of claim 10 and 23, the sensor (potentiometer) to sense the relative movement of the first and second support members of the adjustable pedals, but fails to show the pulses indicating the rotation of the screw (Hall effect sensor).

It would have been obvious to replace the potentiometer of Chapman et al. with a Hall effect sensor since the Examiner takes Official Notice of the fact that both sensors measure the relative movement of the adjustable pedal and the selection of any of these known sensors to produce pulses for the controller in Chapman et al. would be within the level of ordinary skill in the art.

***Allowable Subject Matter***

7. Claims 32-35 are allowed.

***Response to Arguments***

8. Applicant's arguments with respect to claims 8, 9, and 21 have been considered but are moot in view of the new ground(s) of rejection.

9. In response to the applicant's argument that Chapman et al. fails to show the newly added limitation in claims 1 and 19, it is the Examiner's view that such limitation is anticipated by Chapman et al.. As Chapman et al. disclosed in the detailed description, the controller automatically stops the power to the motor when signals from the sensor indicate that there is no

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relative movement while power is provided to the motor. When the sensor parts 8 and 9 are separated, the controller 22 opens the circuitry, thus stopping the power to the motor. (see column 3, lines 29-30).

10. In response to the applicant's argument that Chapman et al. fails to show the controller as recited in claim 23, it is the Examiner's view that Chapman et al. discloses such limitations as recited in claim 23. Chapman et al. shows the controller 22 that determines the position of the support members based on the signals from the sensor P by using the memory chip 26 and automatically stops the motor when the relative position is not maintained. (see column 3, lines 26-30).

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (703) 305-0922. The examiner can normally be reached on Tuesday - Friday; 8:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

chk  
March 6, 2004

  
**CHONG H. KIM**  
**PRIMARY EXAMINER**